

MDA 4V HD-SDI

ONE INPUT, 4 OUTPUT, HD-SDI
DISTRIBUTION AMPLIFIER

- Automatically adapts to SMPTE and ITU digital video standards
- Data rates up to 3G-SDI video
- Passes embedded audio, ancillary ID, and metadata information
- Input format indicators
- Automatic input equalization
- Four buffered and re-clocked outputs
- Rack-mountable
- External international power supply included



The MDA 4V HD-SDI is a compact one input, four output distribution amplifier for SDI and multi-rate HD-SDI serial digital video, including 3G-SDI. It is ideal for use in applications requiring distribution of serial digital video signals, such as broadcast and video production facilities, rental and staging, and medical imaging systems.



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DESCRIPTION

The **MDA 4V HD-SDI** is a compact one input, four output distribution amplifier for SDI and multi-rate HD-SDI serial digital video signals up to 2.97 Gbps. It automatically recognizes and adapts to common serial digital video signals that comply with SMPTE and ITU standards, including SMPTE 259M, 292M, and 424M, and ITU-R.BT.601 and BT.1120. The MDA 4V HD-SDI is ideal for use in broadcast and video production facilities, medical facilities, rental and staging, and other applications requiring a single serial digital video source to be sent to up to four displays at the same time.

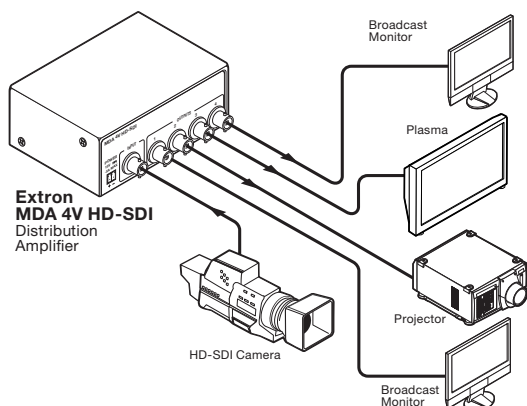
The MDA 4V HD-SDI features automatic input equalization up to 1000 feet (300m) for all SDI and HD-SDI data rates from 19 Mbps to 2.97 Gbps. Output reclocking is provided for recognized SDI and HD-SDI standard data rates, including 270 Mbps, 1.485 Gbps, and 2.97 Gbps. A convenient front panel data rate indicator allows visual confirmation of input data rates for quick visual identification of the incoming digital video signal.

Housed in a rack-mountable 1U, one-quarter rack width metal enclosure, the MDA 4V HD-SDI is ideal for easy integration into both new and existing A/V systems, including broadcast and production facilities, command and control centers, and medical imaging facilities.

FEATURES

- Automatically adapts to SMPTE and ITU digital video standards
- Supports data rates up to 3G-SDI video
- Passes embedded audio, ancillary ID, and metadata information
- Input format presence LED indication
- Automatic input equalization
 - SDI - up to 1000 feet (300 m) on RG59
 - HD-SDI - up to 300 feet (100 m) on RG59
- Automatic output reclocking
 - 270 Mbps - up to 1,000 feet (300 m) on RG59
 - 2.97 Gbps - up to 300 feet (100 m) on RG59
- Rack-mountable, 1U, quarter rack width metal enclosure
- External international power supply included

APPLICATION DIAGRAM



SPECIFICATIONS

VIDEO

| | |
|----------------------------------|---|
| Gain | Unity |
| Resolution | 8 or 10 bits, automatic |
| Operation standards | SMPTE-259M, SMPTE 292M, SMPTE 424M, ITU-R BT.601, ITU-R BT.1120 |
| Equalization and reclocking..... | Automatic for up to -30 dB of cable loss |
| Auto data rate lock..... | Yes |

VIDEO INPUT

| | |
|---------------------------------|---|
| Number/signal type | 1 single link SDI, HD-SDI, or 3G-SDI digital component video |
| Connectors | 1 female BNC |
| Data rates | 19 Mbps to 2.97 Gbps |
| Input cable equalization..... | Automatic |
| HD-SDI | 150 m using Extron RG6 cable 100 m using Extron RG59 cable |
| SDI | 200 m using Extron RG6 cable 150 m using Extron RG59 cable |
| Nominal level..... | 0.8 Vp-p |
| Minimum/maximum levels | 0.5 V to 1 Vp-p with no offset |
| Impedance | 75 ohms |
| Return loss | <-15 dB @ 5 MHz to 2.97 GHz |
| DC offset (max. allowable)..... | 5 V |
| Input coupling | AC |

VIDEO OUTPUT

| | |
|------------------------------|--|
| Number/signal type | 4 single link SDI, HD-SDI, or 3G-SDI digital component video |
| Connectors | 4 BNC female |
| Reclocking | Automatic for 270 Mbps, 1.485 Gbps, 2.97 Gbps, or bypassed for other rates |
| Nominal level..... | 0.8 Vp-p |
| Minimum/maximum levels | 0.5 V to 1.0 Vp-p |
| Impedance | 75 ohms |
| Return loss | <-15 dB @ 1 MHz |
| DC offset | ±5 mV with input at 0 offset |

GENERAL

| | |
|---------------------------------------|--|
| External power supply..... | 100 VAC to 240 VAC, 50/60 Hz, external, autoswitchable; to 12 VDC, 1 A, regulated |
| Power input requirements..... | 12 VDC, 0.4 A |
| Cooling..... | Convection, unvented |
| Rack mount..... | Yes, with optional standard 1U rack shelf, part #60-190-01 or 60-604-01; or with VersaTools® 1U, 3.5" deep rack shelf, part #60-190-20 or 60-604-20; or with the MBB 100 Back of the Rack Mounting Kit, part #70-367-01. Also furniture mountable with optional VersaTools Under Desk Mounting Kit MBU 123, part #70-212-01. |
| Enclosure type | Metal |
| Enclosure dimensions | 1.7" H x 4.3" W x 3.0" D (1U high, quarter rack wide) 4.3 cm H x 10.9 cm W x 7.6 cm D (Depth excludes connectors.) |
| Product weight | 0.5 lbs (0.2 kg) |
| Shipping weight | 2 lbs (1 kg) |
| Vibration | ISTA 1A in carton (International Safe Transit Association) |
| Listings..... | UL, CUL |
| Compliances | CE, FCC Class A, VCCI, AS/NZS, ICES |
| MTBF | 30,000 hours |
| Warranty..... | 3 years parts and labor |
| NOTE: All nominal levels are at ±10%. | |

| Model | Version Description | Part Number |
|---------------|---------------------------------|-------------|
| MDA 4V HD-SDI | 1x4 High Definition - SDI | 60-884-01 |

Specifications are subject to change without notice.



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